

Nova et Vetera

HISTORY OF THE R.C.S.

This official history of the Royal College of Surgeons* begins with the separation from the Barber-Surgeons Company, which, through the influence of Thomas Vicary, had been established by Act of Parliament in 1540. Another Act of Parliament dissolved from June, 1745, the old union and established a new corporation: "the master, governors and commonalty of the art and science of Surgeons in London." John Ranby and William Cheselden were active in effecting this change. In 1751 Surgeons' Hall in the Old Bailey was built. John Hunter's name through his work and the Hunterian Museum is imperishably associated with the College, but he was too busy with his scientific researches and "earning that damned guinea," to take an active part in its administration, though he was a member of the Court of Assistants. In 1796 the Company of Surgeons dissolved because a master was elected without a proper quorum. In 1800 the surgeons' difficulties were solved by an appeal to the Crown, and the Royal College of Surgeons in London was established by Charter of King George III. In 1822 a supplementary Charter replaced the Master and Governors by a Council with a President and Vice-presidents. The new College had been built in Lincoln's Inn Fields. The history of the library and museum are well described in two special chapters, the library by Mr. W. R. LeFanu, the librarian, and "John Hunter's Museum" by Miss Jessie Dobson, the anatomy curator.

Sir Zachary records the progress of the College from strength to strength: the founding in 1843 of the Fellowship which has come to be regarded as the highest of surgical distinctions; the new Charter this advance necessitated, the title being changed to the Royal College of Surgeons of England; the bearings of the Medical Act of 1858; the birth of the dental profession; the fight for the admission of women; the Conjoint Examination; the discussions with London University; the effects of the first world war. He notes how Lord Moynihan encouraged the revival of research, aided by bequests and gifts such as those of Sir G. Buckston Browne. The College has also been fortunate in having had such eminent comparative anatomists as Sir Richard Owen, Sir Arthur Keith, and Professor Wood-Jones in its service.

In the latter part of the book the history is told of the bombing of the College in the second world war, and how, under the able Presidency of Lord Webb-Johnson, success was reborn out of disaster, with the help of munificent bequests, including those of Lord Nuffield, its honorary Fellow and gold medallist. The College has, in fact, become a University of Surgery with its own faculties and professors. Its postgraduate teaching and research activities attract increasing numbers of students, many from the British Commonwealth and from other countries overseas.

This is a great book which reflects equal credit on the College and on its distinguished historian. It is well produced and copiously illustrated. The dust cover has a reproduction in colour of the coat-of-arms of the College and a portrait of the author.

ARTHUR S. MACNALT, Y.

GIAMBATTISTA DELLA PORTA AND THE SEGRETI

When 25-year-old Giambattista della Porta formed an "academy" at Naples in 1560 he was but doing no more than what hundreds of his countrymen had done, and were to do, throughout the century. Like them, he gave it a strange name: the Accademia del Segreti, or Academy of

Secrets. Even stranger and more fantastic names had been chosen by other academy founders: the Lunatici (also of Naples), the Extravaganti, the Fulmiales, and of the Chaff (della Crusca). Nor was it the first academy to turn its attention to science, for an academy had been instituted seventy-five years earlier at Milan to nourish arts and sciences. Indeed, the total number of Italian academies during the century runs well into three figures. Why were the Segreti so different? The answer is that each member was obliged to have made a significant discovery in physical science. This reflected della Porta's own interests, manifested in a book he had published two years before the society was formed: *Magiae naturalis, sive de miraculis rerum naturalium libri iii*. This manifesto, translated into French, Italian, and German, evoked in Italy the charge of witchcraft. Though he cleared himself of the charge before the Inquisition, this charge was repeated some years later. This, coupled with the names and the activities of the Segreti, evoked hostility and they were suppressed.

But della Porta was not to be discouraged. Under the patronage of Cardinal Luigi d'Este he travelled around the Italian peninsula. In 1580 he manufactured at Venice a parabolic mirror. He undertook chemical and biological research. Amongst his numerous subsequent works was *De humana physiognomia* (1586), a strange and exciting book. It shows the analogies of humans to animals. Some of its plates are curious anticipations of Lavater and Sheldon. Meanwhile his *Magiae naturalis* was brought up to date with a confutation of witches, a treatise on magnetism, and an account of the camera obscura. He disputed with Campanella, the noted Jesuit utopist; wrote a rural encyclopaedia; and in 1593 explored the application of mathematical techniques to biological phenomena.

Such imaginative "experimentation," given wide currency by his ready pen, won him disciples. A Frenchman, N. C. F. de Peiresc, came to visit him, and returned to France to found a similar group. In Porta's own home town of Naples his work was intermittently revived, by Stigiola, who worked on refraction, and by physicians like Tomaseo Cornelio and Lionardi di Capoa, who used to meet in the house of Marco Aurelio Severino (1580-1656), a skilful surgeon and anatomist. Severino's skill found ample scope in 1610 in the diphtheria epidemics of Naples, when he practised tracheotomy. Severino's use of refrigerants to dull pain won acceptance, whilst his use of comparative anatomy in *Zootomia Democritae* (1645) was characteristically in the tradition of the Segreti.

Inspired by della Porta's *Magiae naturalis*, Prince Federico Cesi of Rome established in 1603 the Accademia dei Lincei. This took (from the *Magiae naturalis*) as its emblem the sharp-eyed lynx. Indicating its filiation, Cesi came down to Naples to establish a branch organization, of which della Porta became president. The Lincei planned to operate with botanic gardens and laboratories, and to publish their proceedings. They published two of Galileo's early books. The members—numbering 32—carried on experiments on their own account. The Academy of the Lynx lived up to its name, for the first systematic observations with the microscope are generally held to be those of one of the original four members, Francisco Stelluti on honeybees in 1625.

By 1609 the Lincei had a German group, a Roman group, and a Florentine group. The German group included G. Schreck, G. Faber, M. Welsler, and T. Muller; the Roman group included C. Muti and V. Cesarini; and the Florentine group included F. Salviati, Galileo's disciple, who appears as a character in Galileo's *Dialogue concerning Two Chief World Systems* (1632) and the *Discourses on Two Sciences* (1638). Galileo had joined the Lincei in 1611 and was probably encouraged by them to publish *Letters on the Solar Spots* (1613). Galileo was first warned by the Catholic Church in 1615, the year of della Porta's death.

Della Porta's devotion, though primarily to physics, spread over many fields. He wrote on the force of steam (a pioneer work), on fortifications, on distillation, and on

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*The Royal College of Surgeons of England. A History. By Zachary Cope, Kt., F.R.C.S. (Pp. 360+xii; illustrated. 63s.) London: Anthony Blond. 1959.

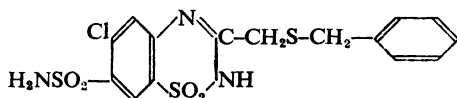
To-day's Drugs

With the help of expert contributors we publish below notes on a selection of drugs in current use.

Benzthiazide

"Fovane" (Harvey Pharmaceuticals).

Chemistry.—Benzthiazide is 3-benzylthiomethyl-6-chloro-7-sulfamyl-1,2,4-benzothiadiazine-1,1-dioxide. It is a derivative of chlorothiazide and has the following structural formula:



Pharmacology.—Benzthiazide by its action on the renal tubules has a diuretic action leading to increased excretion of sodium, chloride, and water. It also increases potassium excretion; and the electrolyte pattern of the urine with respect to sodium, chloride, and potassium shows no consistent difference from that after administration of chlorothiazide, hydrochlorothiazide, or hydroflumethiazide. It resembles hydrochlorothiazide and hydroflumethiazide in having little effect on bicarbonate excretion.

Therapy.—Benzthiazide is supplied as 50-mg. scored tablets, and can be given for the relief of oedema in cardiac failure, hepatic cirrhosis, renal disease, premenstrual tension, toxæmia of pregnancy, and when water retention occurs as a consequence of steroid therapy.

The dosage range for initial treatment is 50–200 mg., depending on the degree of oedema, and for maintenance therapy 25–50 mg. The drug should be given as a single dose in the morning, and to minimize loss of potassium intermittent treatment on alternate days or twice weekly is advisable. Benzthiazide may also be used to potentiate the hypotensive effect of reserpine and ganglionic-blocking agents.

The drug appears to have an action similar to, if not identical with, that of other benzthiadiazines, and cannot, therefore, be considered a therapeutic advance.

Contraindications and Toxicity.—Experience with this diuretic is still limited, but toxic effects have not so far been reported. Benzthiazide does, however, increase the excretion of potassium, and may therefore be expected to induce coma in patients with ascites due to severe cirrhosis of the liver. It will also increase the liability to digitalis intoxication in cardiac failure.

N.H.S. Basic Price.—100 50-mg. tabs. for 58s.

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telescopes. As if this were not enough, he wrote three tragedies (only one of which survives), 29 comedies (of which 14 survive), and one tragi-comedy. He was the Italian Francis Bacon; a trumpeter calling others to combat.

The Segreti and the Lincei were prototypes for later groups, like the German Academia Naturae Curiosorum (in 1652) and the Florentine Accademia del Cimento (in 1657). Their persistent quest for knowledge of the physical world, married to the anatomical investigations of Padua, did much to hasten the evolution of physiology. For when the famous medical school at Padua utilized the techniques of Segreti and Lincei they were able to explain the mechanical functions and apparatus of the body. Symbolizing this fruitful marriage, Santorio, born in the year after the Segreti was formed, published his famous *De Medicina Statica* in 1614, the year before della Porta died.

W. H. G. ARMYTAGE.

Correspondence

Because of heavy pressure on our space, correspondents are asked to keep their letters short.

Conservative Treatment of Ulcerative Colitis

SIR,—The fears expressed by Dr. R. W. Cockshut (March 5, p. 731) concerning the development of carcinoma in ulcerative colitis are well founded. We have recently published our conclusions following an extensive study based on an analysis of 304 cases of cancer developing in patients with ulcerative colitis.¹ Of these patients 72% have already died, and only 4.2% of the remainder have so far survived to five years following surgery. In 112 patients sufficient detail was available to permit statistical analysis; the calculated expected survival rate of every case followed to five years was 18.6%. Of the 304 patients who developed cancer 34 did so in retained colon following previous ileostomy or caecostomy: in two cases cancer arose in the remaining bowel after previous segmental resection: in 11 patients a growth developed in the remaining rectal stump after previous ileostomy and colectomy, and three further cases developed cancer in the remaining rectum after ileoproctostomy. Latterly two further instances presented of carcinoma developing in a rectal stump after ileoproctostomy. Thus of 306 cases with cancer 52 underwent a previous surgical procedure for ulcerative colitis with incomplete eradication of diseased bowel.

We note that Mr. Stanley Aylett accepts (March 19, p. 876) the risk of the development of neoplasia and agrees on its lethal characteristics; nevertheless he feels that retention of the rectum is permissible, since "total colectomy and ileorectal anastomosis will effect a cure, the disease in the remaining rectum resolving once the whole of the ulcerated colon has been excised." This is not invariable, however, as was shown by a case Mr. Aylett reported in a review of 120 cases treated by ileoproctostomy.² "One patient has developed cancer of the rectum. He was aged 19 at the time of operation and had had colitis since the age of 2. The rectal inflammation failed to resolve after total colectomy and ileorectal anastomosis." The rectum is diseased in not less than 95% of cases; we believe that it should therefore be removed in the treatment of ulcerative colitis.—We are, etc.,

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REFERENCES

- ¹ Slaney, G., and Brooke, B. N., *Lancet*, 1959, 2, 694.
- ² Aylett, S., *Proc. roy. Soc. Med.*, 1959, 52, Suppl. p. 24.

Dumping Syndrome

SIR,—With reference to the recent article by Mr. M. Hobsley and Mr. L. P. Le Quesne on the effect of insulin in the dumping syndrome (January 16, p. 147), we have used tolbutamide on a 62-year-old male patient who has had typical dumping syndrome since a subtotal gastrectomy in January, 1957.

The patient presented with drowsiness, a sensation of epigastric distension, borborygmi, and nausea after meals. These symptoms were so incapacitating that he found it difficult to continue with his work and had lost much weight.